AMENDMENTS TO THE SPECIFICATION

Kindly replace the paragraph on page 7 beginning at line 3 and ending at page 7, line 17 with the following amended paragraph:

The active layers **106** may include two or more layers with each layer having different charge-transfer properties than an adjacent layer. In the case of photovoltaic devices, the active layers **106** may include one or more light-absorbing materials. The active layers **106** may include organic or inorganic semiconducting materials. Examples of suitable active layer materials are described in commonly assigned US patent application serial number 10/782,017, published as US Patent Application Publication 20050183767A1 entitled "SOLUTION-BASED FABRICATION OF PHOTOVOLTAIC CELL[[.]]", the entire disclosures of which are incorporated herein by reference, and in commonly assigned US patent application serial number 10/443,456, now US Patent 6,946,597 entitled "PHOTOVOLTAIC DEVICES FABRICATED BY GROWTH FROM POROUS TEMPLATE", the entire disclosures of which are incorporated herein by reference, and in commonly assigned US patent application serial number 60/390, 904 entitled "NANO-ARCHITECTED / ASSEMBLED SOLAR ELECTRICITY CELL", the entire disclosures of which are incorporated herein by reference. Further, the active layers **106** may be used as a component or components in an organic light emitting diode, electrochromic window, or other optoelectronic device.

Kindly replace the paragraph on page 8 beginning at line 19 and ending at page 9, line 10 with the following amended paragraph:

By way of example, and without limitation, if the optoelectronic device is to be a photovoltaic device, the active layers **106** may include material of the general formula $CuIn_{1-x}Ga_x(S \text{ or } Se)_2$. Such a layer may be fabricated on the bottom electrode **104** by co-sputtering, or by depositing a nanoparticle-based ink, paste or slurry, e.g., in a film roughly 4 to 5 microns thick when wet. Examples of such nanoparticle-based inks are described e.g., in US Patent Application Publication ~~serial~~ number [[_____]] 20050183767A1, ~~titled "SOLUTION-BASED FABRICATION OF PHOTOVOLTAIC CELL" (Attorney Docket No. NSL-029), filed February 19, 2004~~, which [[is]] has been incorporated herein by reference. The film may be annealed by heating to a temperature sufficient to burn off any binders or cap layers on the particles and sinter the particles together. The resulting layer may be about 1 micron to about 2 microns thick after annealing. After annealing, the film may optionally be exposed to selenium vapor at about 300-500°C for about 30-45 minutes to ensure the proper ~~stoichiometry~~ stoichiometry of Se in the film. To carry out such a Se vapor exposure, the film, if deposited on a flexible substrate, can be wound into a coil and the coil can be coated so that the entire roll is exposed at the same time, substantially increasing the scaleability of the Se vapor exposure process. Examples of processing a coiled substrate are described e.g., in US Patent Application serial number 10/782,545, titled "HIGH THROUGHPUT SURFACE TREATMENT ON COILED FLEXIBLE SUBSTRATES" ~~(Attorney Docket No. NSL-025)~~, and published as US Patent Application Publication 20050186338,which is incorporated herein by reference.

Kindly replace the paragraph on page 9 beginning at line 20 and ending at page 10, line 2 with the following amended paragraph:

The top electrode layer **108** is often (though not invariably) transparent, or at least translucent. Examples of suitable transparent conducting materials for the top electrode layer **108** include transparent conductive oxides (TCO's) such as indium-tin-oxide, (ITO), or tin oxide, (with or without fluorine doping), zinc oxide, Al-doped zinc oxide, and the like. Such TCO layers may be combined with metallic grids of additional lower resistance materials, such as e.g. screen-printed metal-particle pastes (e.g. silver-paste). In addition, the top electrode layer **108** may include a conductive polymer such as conductive polythiophene, conductive polyaniline, conductive polypyrroles, PSS-doped PEDOT (e.g. Baytron™), a derivative of PEDOT, a derivative of polyaniline, a derivative of polypyrrole. In addition, conductive polymers may be combined with metallic grids or wire arrays and/or a TCO to provide a transparent conductive electrode. Examples of such conductive electrodes are described, e.g., in US Patent Application Serial No. ~~10/429,261~~ 10/403,997, now US Patent 6,936,761, entitled "IMPROVED TRANSPARENT ELECTRODE, OPTOELECTRONIC APPARATUS AND DEVICES", the disclosures of which are incorporated herein by reference.